ABSTRACT OF THE DISCLOSURE

A method of providing multicast routing for use in ad hoc broadcast networks, such as wireless and mobile networks. The method is described within a protocol referred to as core-assisted mesh protocol, or CAMP. The method departs from

5   traditional tree-structured multicast protocols and utilizes multicast meshes in which the network need not be flooded with control or data packets to establish routing paths. Each router configured for CAMP is capable of accepting unique packets arriving from any neighbor in the mesh, wherein packets are forwarded along reverse shortest paths to the receiver. Multiple cores may be defined for a group wherein the loss of a single

10   core does not prevent packet flow. Routers for sender-only hosts are allowed to join the multicast mesh in simplex mode, and in certain cases may join without the sending of a join request.